



Injection Drug Users

March 2006

Introduction

Since the beginning of the HIV/AIDS epidemic, injection drug use (IDU) has been a leading cause of HIV infection. Injection drug use not only contributes to the spread of HIV through the sharing of syringes and other equipment among those who inject, but also through transmission to the sexual partners and children of injection drug users.

General Statistics:

- As of December 31, 2004, 31% (N=4,767) of people living with HIV/AIDS (PLWH/A) were reported to have a history of IDU. An additional 6% (N=879) of PLWH/A were exposed to HIV through heterosexual sex with an injection drug user and 1% (N=39) were children born to an HIV-infected mother who injected drugs and/or had sex with an injection drug user.
- Among people diagnosed with HIV infection within the three-year period 2002 to 2004, 18% (N=498) had a history of IDU and an additional 4% (N=121) were exposed through heterosexual sex with an injection drug user.

Regional Distribution:

IDU was the leading primary reported mode of exposure in the Central and Western Health Service Regions among people living with HIV/AIDS and those recently diagnosed with HIV infection.

Among cities with over 20 people diagnosed with HIV infection within the three-year period 2002 to 2004, the following have the highest proportions of infection with IDU as the primary reported mode of exposure (N=number with IDU or MSM/IDU as exposure mode):

- New Bedford 44% (N=30)
- Fall River 39% (N=17)
- Holyoke 36% (N=16)
- Springfield 29% (N=61)
- Lawrence 26% (N=17)
- Worcester 25% (N=40)
- Framingham 20% (N=7)
- Chicopee 18% (N=4)
- Boston 14% (N=112)
- Medford 13% (N=4)

Gender:

- Of 4,767 PLWH/A who reported injecting drugs, 71% were male and 29% were female. Similarly, among people recently diagnosed with HIV infection with IDU exposure, 72% were male and 28% were female.
- Among IDU-related exposures, such as heterosexual sex with an injection drug user and being a child born to an HIV-infected mother who injected drugs or had sex with an injection drug user, females accounted for 79% and males 21% of PLWH/A. Similarly, females accounted for 74% of recent IDU-related HIV diagnoses and males 26%.
- Nationally, 27% of females living with HIV/AIDS (in 35 areas with confidential name-based HIV reporting) at the end of 2004 were estimated to be exposed through IDU¹, compared to 31% in Massachusetts.
- Nationally, 19% of males living with HIV/AIDS (in 35 areas with confidential name-based HIV reporting) at the end of 2004 were estimated to be exposed through IDU¹, compared to 27% in Massachusetts.

Note: People of undetermined risk are redistributed to an exposure category in the national estimates, but not in the Massachusetts proportions. This makes the difference between national and state proportions appear smaller than it is.

Race/Ethnicity:

- Forty percent of PLWH/A on December 31, 2004 with a history of IDU were white (non-Hispanic), 23% were black (non-Hispanic), 36% were Hispanic and 1% were of other race/ethnicities. Similarly, among people recently diagnosed with HIV infection with a history of IDU, 40% were white (non-Hispanic), 22% were black (non-Hispanic), 36% were Hispanic and 2% were of other race/ethnicities.
- Among females living with HIV/AIDS with a history of IDU, 49% were white (non-Hispanic) compared to 37% of males and 27% were Hispanic compared to 39% of males. Twenty-three percent of both males and females were black (non-Hispanic).

Age:

- Among persons recently diagnosed with HIV infection, those with a history of IDU were older than those with other modes of exposure. Five percent of injection drug users diagnosed with HIV infection within the three-year period 2002 to 2004 were 13-24 years old compared to 9% of people exposed to HIV through all other modes of exposure.
- On December 31, 2004, 2% of PLWH/A exposed to HIV infection through IDU (or male-to-male sex and IDU) were under 30 years old compared to 8% of PLWH/A exposed through all other modes of exposure, 21% were 30-39 years old compared to 28%; 52% were 40-49 years old compared to 41% and 26% were age 50 years or above compared to 21% of PLWH/A without a history of IDU.

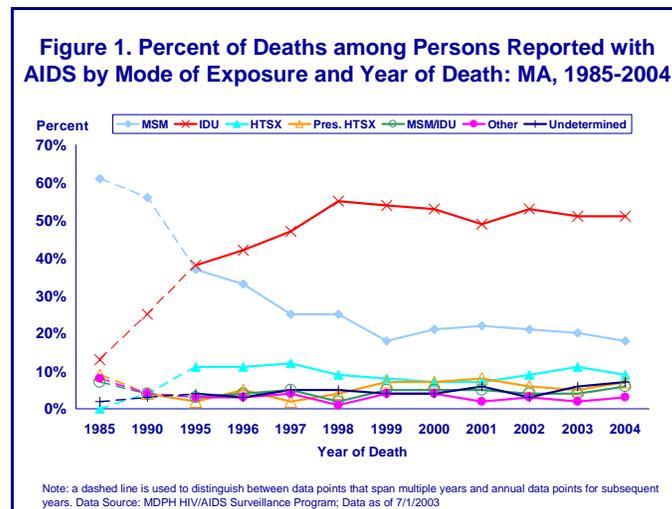
HIV Related Morbidity and Mortality among IDU:

AIDS Diagnoses

- From 1995 to 2003, injection drug use accounted for the largest number of AIDS diagnoses among exposure modes. In 2004 the number of AIDS diagnoses attributed to male-to-male sex (131) surpassed the number attributed to injection drug use (128).

Mortality with AIDS

- From 1995 to 2004, the proportion of deaths among people diagnosed with AIDS represented by those who had a history of IDU rose from 38% to 51%.



Injection Drug Use among Youth in High School²

- In 2003, 2.2% of all respondents to the Massachusetts Youth Risk Behavior Survey reported ever using a needle to inject an illegal drug.
- As in prior years, in 2003, injection drug use was more common among males (2.9%) than among females (1.5%), but did not vary substantially by grade or by race/ethnicity.

Injection Drug Use among Program Participants:

Needle Exchange Participants³

- Among 5,315 participants in state-funded needle exchange programs in state fiscal year 2005, 33% reported being under age 20 years at first injection.

Substance Abuse Admissions⁴

- From state fiscal year 1995 to 2004, the *percentage* of admissions to state-funded substance abuse treatment reporting the use of a needle to inject drugs within a year of admission rose steadily from 19% to 31%. During this time period the *number* of admissions reporting needle use within one year increased 66% from 18,932 in fiscal year 1995 to 31,466 in fiscal year 2004.
- From state fiscal year 1995 to 2004, the percentage of admissions to state-funded substance abuse treatment for heroin addiction increased from 25% to 38% of total admissions. During this time period, the number admissions for heroin use increased by 55% from 24,754 in fiscal year 1995 to 38,479 in fiscal year 2004.
- Ninety-one percent of admissions to state-funded substance abuse treatment in fiscal year 2004 who reported needle use within the past year were unemployed, compared to 75% of total admissions; 27% were homeless compared to 18% of total admissions.

Data Sources:

All HIV/AIDS Case Data: Massachusetts Department of Public Health (MDPH) HIV/AIDS Surveillance Program, Data as of July 1, 2005

¹ Centers for Disease Control and Prevention. *HIV/AIDS Surveillance Report, 2004*. Vol. 16. Atlanta: US Department of Health and Human Services, Centers for Disease Control and Prevention; 2005:[17]. Also available at: <http://www.cdc.gov/hiv/stats/hasrlink.htm>.

² Youth Risk Behavior Survey Data: Massachusetts Department of Education, Youth Risk Behavior Survey

³ MDPH HIV/AIDS Bureau, Prevention and Education Program

⁴ MDPH Bureau of Substance Abuse Services

Additional Reference of Interest:

Centers for Disease Control and Prevention. HIV Diagnoses Among Injection-Drug Users in States with HIV Surveillance --- 25 States, 1994—2000. *MMWR*. 2003;52:634-636

Des Jarlais DC, Perlis T, Arasteh K, Hagan H, Milliken J, Braine N, Yancovitz S, Mildvan D, Perlman DC, Maslow C, Friedman SR. "Informed altruism" and "partner restriction" in the reduction of HIV infection in injecting drug users entering detoxification treatment in New York City, 1990-2001. *J Acquir Immune Defic Syndr*. 2004 Feb 1;35(2):158-66

Fuller CM, Vlahov D, Latin CA, Ompad DC, Celentano DD, Strathdee SA. Social Circumstances of Initiation of Injection Drug Use and Early Shooting Gallery Attendance: Implication for HIV Intervention Among Adolescent and Young Adult Injection Drug Users. *Journal of Acquired Immune Deficiency Syndrome*. 2002; 32:86-93

Reiss TH, Kim C, Downing M. Motives for HIV Testing Among Drug users: An Analysis of Gender Differences. *AIDS Education and Prevention*. 2001, 13(6):509-523.

Somlai AM, Kelly JA, McAuliffe TL, Ksobiech K, Hackl KL. Predictors of HIV sexual risk behaviors in a community sample of injection drug-using men and women. *AIDS Behav*. 2003 Dec;7(4):383-93

Wood E, Kerr TM, Spittal PM, Li K, Small W, Tyndall MW, Hogg RS, O'Shaughnessy MC, Schechter MT. The Potential Public Health and Community Impacts of Safer Injecting Facilities: Evidence from a Cohort of Injection Drug Users. *Journal of AIDS*. 2003;32:2-8.

For more detailed information and a description of data limitations please see "HIV/AIDS in Massachusetts: An Epidemiologic Profile," available online at www.mass.gov/dph/aids